

The Heterodyne

Newsletter of the West Valley Amateur Radio Association

May Meeting

**All Things Field Day
by Jim Peterson, K6EI**

**Wednesday May 13
Meeting Starts at 7pm**

Meeting Location:
American Red Cross,
Silicon Valley Chapter
2731 N. First Street at Plumeria Dr
(southwest corner) in San Jose
Map at www.wvara.org/meetings.html

WVARA Repeaters (W6PIY)		
Band	Frequency	PL
6 Meters	52.580- MHz	151.4 Hz
2 Meters	147.39+ MHz	151.4 Hz
1.25 Meters	223.96- MHz	156.7 Hz
0.70 Meter	441.35+ MHz	88.5 Hz
0.23 Meter	1286.2- MHz	100 Hz

Club Net

WVARA's club net is on the W6PIY repeaters each Tuesday at 8:30 pm. All repeaters are linked together during the net. The net script can be found at www.wvara.org/net.html.

Visitors Are Welcome!

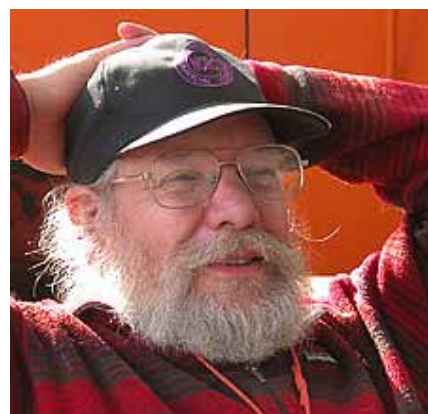
President's Letter

The Lock In

One of the things that struck me when I first started to connect up amateur radio equipment is the vast and wonderful variety of connectors used. My radios have 12 volt power connectors in Molex, Anderson PowerPole, and 2.1mm concentric forms. I have RF connectors in UHF, Mini-UHF, N, BNC, SMA, and TNC, and there are many other forms. I have a bewildering array of microphone connectors which include TRRS 1/4 inch plugs, 8 pin and 7 pin connectors, and RJ45 connectors.

A clue to the reason for all of this variety may come from noting that the Icom DSTAR digital voice radios won't interoperate with the Yaesu digital voice radios, even though they use the same voice encoding (codec) chip. Perhaps this incompatibility is deliberate.

If one looks at the radios used in the land mobile radio service -- the police, fire, and business bands -- one will quickly note that each manufacturer has made their radios as incompatible with other manufacturer's radios as possible. Trunking systems and digital voice are specific to each manufacturer.



Since a number of amateur radio manufacturers are also big names in the land mobile radio business, it is not surprising to see the same philosophy of interoperation apply to their amateur radio offerings.

Some manufacturers attempt to use existing connectors. For example, the Elecraft K3 uses the Kenwood microphone connector, as well as the Anderson PowerPole connectors common in the emergency services world.

However, deliberate incompatibility is very disappointing for someone who takes emergency operation seriously. I can't plug a Yaesu microphone into an Icom radio when the Icom microphone fails under emergency conditions. I have to carry a large collection of adapters to connect my radio to the antennas I may have to use. The crowning annoyance comes every time I shift my Miata into 5th gear and bang my knuckles against the microphone connector for the Yaesu FTM-10. I can't move the connector from the dashboard because I can't find a place to buy a microphone extension cord, or the connectors to make one. An extension cord would let me use the connector on the system box in the trunk instead of the one on the control panel in the dashboard.

As amateurs, we should support manufacturers who build radios which use commonly accepted standards. We work very hard to avoid a world where only radios of a particular brand can communicate with each other. We need to avoid being balkanized and locked in.

While there isn't much hope for better connector compatibility, short of replacing the connectors on our radios, there is hope for over the air compatibility. There are several projects aimed at widespread compatibility for digital voice.

Bruce Perens, K6BP and others are working on a radio design which avoids lock in for VHF/UHF digital voice. It is called Algoram[1], which is based on the Whitebox design. It is an open source hardware and software design which uses a smartphone app as the user interface. It will support a variety of codecs and digital protocols, including the Icom and Yaesu ones. (Icom/Yaesu support is possible because the patent on the codec is about to expire.)

As I write, Bruce tells me Algoram radio design is still being tweaked. They are reworking some parts they got wrong in the prototypes and are going to do some short manufacturing runs. Then they will announce a kickstarter campaign to support manufacture at scale. Before hamvention they will put up information at algoram.com on how to participate.

A number of hams are currently using Codec2[2] on HF. This digital voice system works with a bandwidth of 1.25 KHz. Implementations include the FreeDV Linux/Mac/Windows application[3] and the SM1000 Smart Mic[4]

These projects, and others like them, will let digital voice be as universally available as SSB, FM, and AM are now. They are fine examples of the true open nature of amateur radio.

[1] <<http://algoram.com/presentations/Hamcation2015.pdf>>

[2] <<http://en.wikipedia.org/wiki/Codec2>>

[3] <<http://freedv.org/tiki-index.php>>

[4] <<http://www.rowetel.com/blog/?p=3125>>

73, Bill - AE6JV

About the Meeting

All Things Field Day

by Jim Peterson, K6EI

Mark your calendar. This Wednesday's WVARA meeting (7pm, May 13) will be our annual "All Things Field Day". Field Day last year was a real hoot, and this year may be even more fun. At this week's meeting we will review what's new and discuss our plans for this year's Field Day event (to be held June 26-28).

Meeting Location: Silicon Valley Chapter of the American Red Cross, 2731 N. First Street at Plumeria Drive (southwest corner) in San Jose. Visitors are welcome, and of course there will be chocolate chip cookies.

If you haven't been to the Red Cross, "talk-in" is usually available on the Association's repeaters. Best choice would be 2m/220.

And for those who are hungry, several of us will be eating dinner prior to the meeting at the Burger King at 2532 Channing Avenue, just off Seaboard Avenue and near the corner of Trimble Road and De La Cruz Boulevard. Map of restaurant: <http://mapq.st/3-l0rpFmro>

Club Web Page: www.wvara.org

Hope to see you there!

Jim Peterson, K6EI

WVARA Field Day Coordinator



Thanks for a Successful Flea Market

Thank you to the WVARA Team for a successful De Anza Flea Market this morning. We had more than 110 vendors in attendance, sold over 500 cups of coffee and almost 24 dozen doughnuts. In addition, we had a great time getting caught up with old friends. And a few of us, me included, even found a few “boat anchor bargains” to take home at the end of the morning.

- Jim, K6EI



Jon-K6WV Manning the Table



Greg-KK6AVK and Dave-WB6KHP Selling Doughnuts

Field Day Antenna Party #2

At our second Field Day Antenna Party on Saturday, May 2, we tested and tuned the GOTA tribander and the CW station's self-supported dipole. The winch for Svend's tower died (one of the gears got stripped) during the event, and Svend is in the process of getting it replaced. We also tested a recently acquired triband yagi — and found and fixed a dead trap. All in all, a very productive morning.

- Jim, K6EI





In QST -- yet again!

For the fifth year in a row there's a photo in QST of WVARA's Field Day site on Mora Hill. This year our club's photo made it onto page 88 of the April issue. The photo shows Bobby Barnett (KA4VBF) giving a tutorial on amateur satellite communications. That's me on the far left, next to Svend Jensen (KF6EMB) and Mark Sayre (KA6AMB).

And of course Bobby's VHF antenna farm looks very cool.

- Jim, K6EI

2015 Field Day Announcement



The largest on-air Amateur Radio event in the world returns June 27 – 28! If you haven't already started planning your effort, now is the time to do so!

Field Day, the ARRL's largest operating event, is *the* opportunity for getting on the air. Operate with your club, a group of friends, or by yourself from parks, mountaintops, your car — anywhere!

Basic Information

When: 1800 UTC Saturday, June 27 through 1759 UTC Sunday, June 28.

Setup: Stations have a maximum of 24 hours total to use as setup between 0000 UTC Friday and 1800 UTC Saturday. If you wait until 1800 UTC Saturday to begin setup, you may operate until 2100 UTC Sunday.

Reporting Your Score

All scores must be received at ARRL HQ no later than July 31, 2015. No late entries will be accepted. Participants are *strongly encouraged* to use the online Field Day score reporting system at www.b4h.net/cabforms. You



West Valley Amateur Radio Association's Field Day Educational Activity, featuring a satellite communications tutorial with members (left to right) Jim Peterson, K6EI, Svend Jensen, KF6EMB, Mark Sayre, KA6AMB, and Bobby Barnett, KA4VBF. The Educational Activity is just one of the many ways participants can earn bonus points for their Field Day entry. [Jim Peterson, K6EI, photo]

Items For Sale By George, N6NKT:

Booton 92EA RF Voltmeter \$200

Contact George Williams, N6NKT, [n6nkt at yahoo dot com](mailto:n6nkt@yahoo.com)

Send Buy and Sell information to: [het_editor at wvara dot org](mailto:het_editor@wvara.org)

Saturday, June 6th, 2015 – Fremont, CA

AMATEUR RADIO

LICENSE TESTING

This session is produced by the Bay Area Educational Amateur Radio Society – Member W5YI VEC

Study Session, Followed by Exam



When: Saturday, June 6th, 2015
8:00am – 5:00pm

Where: Fremont, CA

Fee: \$30.00 at the Door

Questions: Ross Peterson wb6zbu@arrl.net or 650-349-5349

Register: www.baears.com

Sponsored by:

Fremont Communications Volunteers
(<http://www.fremontares.org>)

Fremont Fire Department
(<http://www.fremont.gov/index.aspx?NID=96>)



Class size is limited, reservations are required.

Prospective Hams should have an active Ham as a sponsor to assist in the familiarization with amateur operation

Reserve Your Space - Be a Ham!



Can't make this class? We can notify you of the next date and location...contact us.



Current information and reservations available at <http://baears.com>

WVARA Net Check-Ins (W6PIY)						
Each Tuesday at 8:30 PM, All Repeaters Linked Together During Net						
Call Sign	Name	04/07/15	04/14/15	04/21/15	04/28/15	05/05/15
AA6RB	Roy				X	
AB6XS	Kevin	X	X	X	X	
AE6JV	Bill	X				
AF6AE	Bill					X
K6BRF	Bert		X		X	
K6QFO	Mike				X	
KA6AMB	Mark	X	X	X		X
KD6VOR	Marv	X	X			
KF6EMB	Svend	X	X	X	X	X
KI6SLX	Peri	X	X			
KJ6CQJ	Dean	X	X		X	
KJ6GMO	Sue	X	X		X	
KJ6ZZI	Michael			X		X
KK6QKQ	Mick		X			
KK6RMB	Tom			X	X	
KK6VF	Kevin	NET	NET	NET	NET	NET
KS6PD	Steve				X	
W6ESL	Tom			X		
W6HOC	Howard	X	X	X	X	
W6PK	Phil	X				
WB6KHP	Dave	X	X	X	X	X

2015 West Valley Amateur Radio Association Board

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The Heterodyne is published monthly by the West Valley Amateur Radio Association and sent to all club members via the web. Please obtain permission from the author to re-publish any article in this publication.

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